Splitting Busses, and Ripping Lines.

There are 2 ways to split busses. Named Nets, and Rippers.

1. Named Nets.

The concept of named nets is simple. Any two points (nets, busses, ports) on the schematic that have the same name are considered connected. To use a subset of the lines in a Bus, you only need to create another bus and name it accordingly. For example, to create a new bus, with just the lines 7-4 of a bigger bus - say A(15:0), you only need to name the new bus A(7:4).

Naming A Net

To name a net (Bus, port or otherwise), select it, and right-mouse-button click. There will be a menu option – **Name Nets**: This option will appear only when one net is selected. Select ‘Name Nets’ to get a text entry Field. Enter the name of the net. Pressing Enter will allow you to place the text field at any location on the schematic.
Named Nets can also be used to reverse to bit order in a bus. This is illustrated in the following example. Here, the Adder accepts values in A(15:0) format, while the rest of the system uses the A(0:15) format (Difference in `Endian-ness`).

2. Rippers.

Rippers can be used to extract a single bit from a bus. By default, if you connect a wire to a Bus, a ripper element will be created. If the Bus is already named (perhaps by having a named port attached to it), you can select the bit number in the bus you want to extract.

Alternatively, you can use the `rip` components in gen_lib. To select the bit, we change the value of ‘R’ on the symbol (using Shift+F7).

You will have to use these components if you have to connect selected lines of dissimilarly named busses. Here, I have connected A(1) to B(8) and A(13) to B(6).